IMAGE-PROCESSING COMPUTER SYSTEM

FOR PHOTOGRAMMETRIC ANALYTICAL MEASUREMENT

5   ABSTRACT OF THE DISCLOSURE

In an image processing computer system for a photogrammetric analytical measurement, a picture has an image of a target with three main reference point areas and an assistant reference point area. Positions of the reference point areas are determined by a two-dimensional picture coordinate system defined on the target. Positions of the main reference point areas are calculated with a three-dimensional camera coordinate system defined on a camera. Positions of the main reference point areas are calculated by a two-dimensional image-plane coordinate system, defined on an image-plane of the camera, based on the calculated three-dimensional positions of the main reference point areas. Camera parameters are calculated based on the two-dimensional positions of the main reference point areas of the picture coordinate system and the positions of the main reference point areas of the image-plane coordinate system.